

DOCUMENT RESUME

ED 441 798

SP 039 256

AUTHOR McGovern, Martha W.
TITLE Images Reveal the "Internal Dialogue" of Realistic Teacher Education. A Script for the Videotaped Presentation with References and Bibliography.
PUB DATE 2000-04-00
NOTE 31p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24-28, 2000).
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Attitude Change; Concept Formation; Elementary Secondary Education; Higher Education; Personal Narratives; *Preservice Teacher Education; *Preservice Teachers; *Realism; Teacher Role; Teacher Student Relationship; Teaching Methods
IDENTIFIERS Reflective Thinking

ABSTRACT

F. A. Korthagen and J. P. A. Kessels (1999) advocate the adoption of the realistic approach for teacher education. The realistic approach provides developing teachers with experiences that call into question the adequacy of their beliefs. When the developing teachers are in a state of flux, the approach both supports reflection for refined perception and offers relevant conceptual knowledge for increased awareness and decision-making power. One preservice teacher was enrolled in such a realistic teacher preparation program and participated in a study which used George Kelly's (1963) repertory grid technique and complementary methods to reveal the "internal dialogue" (J. Goodman, 1988) of belief change. This narrative account traces the preservice teacher's paradigm shift from an authoritarian stance to an authoritative stance that acknowledged the possibility of a complete facilitator role. (Contains 35 references.) (Author/SM)

Images Reveal the "Internal Dialogue"
of Realistic Teacher Education

1

Images Reveal the "Internal Dialogue"
of Realistic Teacher Education
A SCRIPT FOR THE VIDEOTAPED PRESENTATION
WITH REFERENCES AND BIBLIOGRAPHY

Division K - Innovative
Session 16.15 Myths and Realities of Teaching:
Writing and Knowing One's Self
2000 Annual Meeting of AERA
April 24-28, 2000
New Orleans, Louisiana

Martha W. McGovern

Georgia Southern University

Department of Early Childhood Education & Reading

P. O. Box 8083

Statesboro, Georgia 30460-8083

marmcg@gsaix2.cc.gasou.edu

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

M.W. McGovern

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☐ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

2

Abstract

Korthagen and Kessels (1999) advocate the adoption of the realistic approach for teacher education. The realistic approach provides developing teachers with experiences that call into question the adequacy of their beliefs. When the developing teachers are in a state of flux, the approach both supports reflection for refined perception and offers relevant conceptual knowledge for increased awareness and decision-making power. The preservice teacher called Fay was enrolled in such a realistic teacher preparation program and participated in a study which used George Kelly's (1963) repertory grid technique and complementary methods to reveal the "internal dialogue" (Goodman, 1988) of belief change. This account traces Fay's paradigm shift from an authoritarian stance to an authoritative stance that acknowledged the possibility of a complete facilitator role.

Narrator: Korthagen and Kessels (1999) advocate the adoption of the realistic approach for teacher education. (visual of Realistic Teacher Education)

Realistic teacher education seeks to eliminate the dichotomy between declarative and procedural knowledge and recognizes the key importance of beliefs in the learning, actions, and professional development of teachers. (visual of Beliefs)

Realistic teacher education accepts the developing teacher's gestalt and acknowledges that this gestalt or belief system includes information, feelings, prior experiences, values, role conceptions, needs or concerns, and routines. (visual of gestalt contents)

The realistic approach then provides developing teachers with concrete, authentic experiences that call into question the adequacy and/or validity of those gestalts. When the developing teachers are in this state of flux, the realistic approach both supports reflection for refined perception and offers relevant conceptual knowledge for increased awareness and decision-making power. (visual of belief change process)

What follows is the an account of the paradigm shift one preservice teacher experienced as she participated in such a realistic teacher education program. (visual of Fay's Paradigm Shift)

The preservice teacher we will call Fay was enrolled at the regional campus of a large Midwestern university during the academic year 1995-96 when the study took place. The teacher preparation program offered two innovative opportunities that encouraged students to connect

campus course work with classroom practices. (visual of realistic teacher education)

As a participant in Freshman Early Field Experience (FEFE), Fay was placed with a classroom teacher and completed thirty-four contact hours of structured observation and interaction. (visual of FEFE)

In the Apprenticeship Program, Fay was assigned a mentor and participated in the mentor's classroom for six hours per week during her sophomore, junior, and senior years. She was also scheduled to do her student teaching in the same classroom. (visual of Apprenticeship)

Over the course of her teacher preparation, Fay underwent a dialectical change of such scope that it qualified as a paradigm shift. (visual of paradigm shift)

Fay was a non-traditional student in her late thirties. A wife, a mother, and the operator of a house-cleaning business as well as a college student, Fay felt pulled in many directions. She described herself as a screech. (visual of Fay within paradigm shift)

Fay: In terms of music, I'm anything discordant, something with loud, percussive bass. (visual of Fay's sound)

Narrator: Fay's childhood memories of parochial school were not happy ones.

Fay: It's true that people remember their teachers, but not always in a positive way. I had a bad experience in school. The teachers were rigid and had favorites. I was bright and bored. Now I would be challenged, but back then I was told to "shut-up" to "sit down," to rote memorize right answers. I was labeled a rotten kid, was ignored and allowed to flounder. I was the child. They were the adults. They

should have known better. [interview, 3/5/96] (visual of classroom and outsider)

Narrator: For Fay, the Freshman Early Field Experience was an event that created major dissonance in her belief system and triggered extensive reflection. (Visual of FEFE and multiple questions)

Fay: For me, the FEFE experience was really unsettling. I had gone through Catholic schools, thirty years ago, when the whole set-up -- behavior and instruction -- was fairly rigid. As a kid, I never liked school when I was younger. But yet I thought, "Well, that's the way I was taught so that's the way everyone should be taught." So, when I started college, I had pretty concrete attitudes about what I wanted to be.

In fact, my FEFE placement was with a teacher who was like what I thought I wanted to be. She ran a very teacher-controlled classroom. She was great and she was a loving, caring person, and I felt comfortable in her room. It was what I was used to.

But I began to realize I didn't like what I saw going on with the kids. As I watched certain children, I started to see and remember. I would see their behaviors or comments or reactions, and I would say to myself, "I remember that. I know where that's coming from." I came to the realization that even the kindest dictator is still a dictator, and I didn't like that image of a teacher.

And that sort of put me in a quandary. Now what do I do? Because that teacher was what I thought I was trying to become. [interview, 6/20/96] (visual of large question mark)

Marrator: Fay could not continue to aim toward becoming an authoritarian

teacher, but she did not yet have an alternative image. Throughout the program, then, Fay was on a quest to find an appropriate teacher role.

In a manner typical of belief change, Fay first envisioned teacher role options as a dichotomy. A teacher could be either a dictator or a facilitator; classrooms could be either teacher-controlled or student-centered. (visual of dictator -- facilitator dichotomy)

Narrator: Fay reported genuine puzzlement about a classroom that seemed to fall somewhere in between the extremes, but she began to identify a potentially viable mid-point position.

Fay: My sophomore year, as part of the field component of my Studies of Children course, I encountered a fifth grade classroom I really liked. I was especially impressed by the teacher's rapport with the kids. And being with her has had a major impact on how I interact with children.

Discipline isn't a problem in her classroom and yet she isn't rigid. Instruction seems more teacher-oriented, but she isn't a dictator, isn't a book-limited instructor.

She seems to be more than a facilitator and yet she isn't a dictator. Is she an initiator? She seems to be a co-something. Maybe a co-participant. She's in charge but not at the expense of the students' input and exploration. Maybe she is an orchestrator. She keeps everything going. Like with a baton. The conductor of the learning. It's all very personal, but she doesn't get so taken in with empathy that she can't be the teacher.

What worries me, though, is that I'm comfortable with this classroom and yet it seems to be pretty teacher-directed, teacher-

structured. It doesn't seem to fit the description of the constructivist classroom we keep hearing about in our methods classes and reading about in our psychology books. [interview, 4/8/96] (visual of conductor)

Narrator: Fay's uncertainty was exacerbated by her experiences as a college student. She noted that although campus course content promoted adoption of the facilitator role, professors did not always model the recommended role. One such experience strengthened her commitment to a less teacher-controlled classroom. (visual of X-ed out dictator)

Fay: We're taught constructivism and encouraged to be facilitators in the classroom. And it all sounds so marvelous on paper, but I guess I've never seen it in action.

I'm feeling particular conflict right now because I'm in a really frustrating and annoying class. The professor espouses constructivist ideas and promises stimulating discussions and authentic inquiry. The assignments in the syllabus even have potential. But in reality, the class is teacher-dictated and we are the captive audience.

I have earmuffs on now because I'm no longer listening. But the professor is still talking, and the words are trickling down -- repetitiously.

When I am in that professor's classroom, I am thinking that it would be very easy for me to be that way. I really care about the kids and I don't want to be a dictator, but I feel more comfortable when everything is going in the same direction.

That professor has really lost us. And I lose my students when

I'm taking charge of things I don't need to take charge of, things they are perfectly capable of doing themselves. [interview, 5/20/96]

(visual of cloud and baby)

Narrator: In the process of creating a workable teacher role, Fay searched her belief structures for other applicable constructs and experimented with new and evolving beliefs. As Fay reflected upon her professional development, she explored the connections between the teacher role and the mother role.

Fay: The way I've changed most is in my stance on letting children formulate their own standards and exercise self-control. It's a change that's affected how I act at home as well as in the classroom. I'd watch these teachers, and then I'd go home and try it on my kids, like my own little home experiment.

I had raised my own kids to conform to established standards and to be obedient. Before starting my teacher preparation studies, I would have said, "Here's what needs to be done and this is what we will do." Now, I sort of say, "Here's what needs to be done. How are we going to do this?"

I realize now that the [constructivist] approach means giving them the opportunity to see that we can work together. I think they enjoy that sense of responsibility for themselves. They think: "I can do this. I am involved in this. This is mine. I'm going to do it this way. It's a choice."

My kids are really well-mannered, and they know what I expect. I mean, the other approach worked, but it was just because of the force of

my personality. But when I try this way -- negotiating, stopping to have family meetings -- the atmosphere is a lot more pleasant. You can still get the same things done, but the spirit is more a partnership, less an "us against them" thing, less the authority versus the little person relationship. [Interview, 6/20/96] (visual of home and classroom)

Narrator: Fay also used her own teaching experiences in the apprenticeship classroom as a source of material for role formulation. As an apprentice working with the same mentor over two different school years, Fay assumed responsibility for teaching the science curriculum and taught a lesson approximately once per week. In one interview session, Fay explored the teacher role issue by analyzing a lesson she had taught. (visual of emerging teacher role)

Narrator: She first considered how a facilitator would have taught the lesson.

Fay: I'm thinking, for example, of a lesson I taught that explored the concept of gases having weight.

So, as I envision it, in the constructivist or student-centered classroom, the facilitator stands in the front of the room to get the students going and then moves around being a questioner, just visits around asking, "Hey, what are you coming up with?" The students each have their own balances and, in their brains, are thinking about air. What is air? They know they have weighed things before, so they would have to think about some sort of container. They'd be using sort of a trial-and-error process, learning as much by what doesn't work as by

what does. Trying to think how to capture air. There would possibly be frustration, though possibly not. [interview, 6/20/96] (visual of facilitator classroom)

Fay: With constructivism, the students will know the "why" as well as the "what." The constructivist method gives them a chance to make better connections. That is as long as they don't get hung up at some point or off on a tangent some place. Although, I guess that's what a facilitator is for, to prevent that. [interview, 6/20/96] (visual of constructivist thinking)

Narrator: Fay then considered the dictator role and imagined the same lesson in a teacher-centered classroom.

Fay: In the teacher-centered classroom, I have a blackboard, a balance, and the teacher is up here with both of them. The students are seated in rows, to prevent talking, and don't have balances. They are watching the teacher do it all. She says, "Today we are going to measure air." She might ask, "How do you suppose we could do that?" I assume she would allow them that kind of interaction, but she would have the balance up here and she would have the balloon. Then she would explain the process and then go through it. That's what I see as a teacher-centered activity. The students wouldn't have the opportunity to touch or to discuss much. [interview, 6/20/96] (visual of dictator classroom)

Fay: In the students' minds, the knowledge looks like 1, 2, 3, 4 and conclusion. It's like rote memorization. The student would say, "I just memorized what she told us to memorize, and I saw what she did. I

can tell you what she did, but I can't tell you why." [interview,
6/20/96] (visual of dictator thinking)

Narrator: Finally, Fay reflected upon the teacher role she had enacted in
the lesson, and she struggled to find a name for the role she was
developing for herself.

Fay: And then, I'm somewhere here in the middle. As the teacher, I'm in
front of the room but I move around. The students are arranged in
groups and each group has a balance. I lead the whole class in a review
of what we have done previously -- weighing solids and liquids -- and
ask them, "What do you think we are going to do today?"

I don't think I give them a lot of room for going off track. I
feel like I'm giving valuable direction.

I explain the terms and tell them the procedures, and then they
get into groups and do the activity. I want them, when they put those
little cubes in the balance, to think to themselves, "See. Each one of
these little things weighs a gram. I can see that. I can feel that. I
can talk about it." Then we deal with whatever results they get.

[interview, 6/20/96] (visual of enacted teacher role)

Fay: So, in my way of teaching, the knowledge builds up sort of like a
pyramid. They establish a base and then build upon it, each time going
further with it. But they are also making connections. Maybe it is
like a tree. It starts down here and then sort of blossoms and goes all
over the place. The root expands and the trunk gets thicker and
thicker. But the connections are sensible. [interview, 6/20/96]
(visual of pyramid, tree)

Fay: I'm still not sure what to call my teaching style. I am the teacher. Directive facilitator? Sure, because I do want them to make it real for themselves. But I don't want them to waste time or make wrong connections or get frustrated. So, I'm the mom! Oh, great. Just great. [interview, 6/20/96] (visual of directive facilitator and mom)

Narrator: In the final interview of the study, Fay seemed to have completed her paradigm shift and come to a comfortable resolution of the teacher role issue. Through reflection and experimentation, she had used childhood memories, college courses, teaching and mothering experiences, and the example of a specific teacher to construct a workable personal teacher role. (visual of Completed Paradigm Shift)

Fay: Still, even after all this change, I am attracted to that classroom I encountered during my Studies of Children course. I would find far less to criticize in that room than in any other. And I guess as I am teaching, in the back of my mind I am thinking about what she has done. I'll never be the complete facilitator. I'll never be the teacher-centered teacher either, but I'll never be completely rid of the "mom." [interview, 6/20/96] (visual of MOM)

Narrator: Fay's professional development, then, had involved a major paradigm shift, from the authoritarian stance of the old paradigm to a more flexible authoritative stance that acknowledged the possibility of a complete facilitator role. The realistic teacher preparation program had enabled her to make that major shift in belief. (visual of construct with "dictator" and "facilitator" as poles and "directive facilitator" as the midpoint)

Reference

Korthagen, F. A., & Kessels, J. P. A. (1999). Linking theory and practice: Changing the pedagogy of teacher education. Educational Researcher, 28(4), 4-17.

Bibliography

Berliner, D. C. (1988). Implications of studies on expertise in pedagogy for teacher education and evaluation. In New directions for teacher assessment (Proceedings of the 1988 ETS Invitational Conference, pp. 39-68). Princeton, New Jersey: Educational Testing Service.

Brookhart, S. M., & Freeman, D. J. (1992). Characteristics of entering teacher candidates. Review of Educational Research, 62, 37-60.

Calderhead, J., & Robson, M. (1991). Images of teaching: Student teachers' early conceptions of classroom practice. Teaching & Teacher Education, 7, 1-8.

Colby, A., & Damon, W. (1992). Some do care: Contemporary lives of moral commitment. New York: Macmillan.

Dunne, E. (1993). General beliefs about teaching and learning. In N. Bennett & C. Carre' (Eds.), Learning to teach (pp. 73-87). New York: Routledge.

Fransella, F., & Bannister, D. (1977). A manual for repertory grid technique. London: Academic.

Goodman, J. (1988). Constructing a practical philosophy of teaching: A study of preservice teachers' professional perspectives. Teaching & Teacher Education, 4, 121-137.

Grimmett, P. P., & MacKinnon, A. M. (1992). Craft knowledge and the education of teachers. In G. Grant (Ed.), Review of Research in Education, 18, pp. 385-456. Washington, DC: American Educational Research Association.

Grossman, P. L. (1990). The making of a teacher: Teacher knowledge and teacher education. New York: Teachers College Press.

Holt-Reynolds, D. (1992). Personal history-based beliefs as relevant prior knowledge in course work. American Educational Research Journal, 29, 325-349.

Johnson, D. W., & Smith, K. (1991). Active learning. Edina, Minnesota: Interaction Book Company.

Kagan, D. M. (1990). Ways of evaluating teacher cognition: Inferences concerning the Goldilocks Principle. Review of Educational Research, 60, 419-469.

Kagan, D. M. (1992a). Implications of research on teacher belief. Educational Psychologist, 27(1), 65-90.

Kagan, D. M. (1992b). Professional growth among preservice and beginning teachers. Review of Educational Research, 62, 129-169.

Kelly, G. (1963). A theory of personality: The psychology of personal constructs. New York: Norton.

Korthagen, F. A., & Kessels, J. P. A. (1999). Linking theory and practice: Changing the pedagogy of teacher education. Educational Researcher, 28(4), 4-17.

Lortie, D. (1975). Schoolteacher. Chicago: University of Chicago Press.

Marzano, R. J. (1991). Creating an educational paradigm centered on learning through teacher-directed, naturalistic inquiry. In L. Idol and B. F. Jones (Eds.), Educational values and cognitive instruction: Implications for reform (pp. 411-441). Hillsdale, NJ: Lawrence Erlbaum Associates.

Maxson, M., & Mahlios, M. (1994). Images of teaching: Entry level preservice teachers describe their beliefs about teaching and children. The Professional Educator, 17(1), 1-18.

Miles, M. B., & Huberman, A. M. (1990). Animadversions and reflections on the uses of qualitative inquiry. In E. W. Eisner and A. Peshkin, Qualitative inquiry in education; The continuing debate (pp. 339-357). New York: Teachers College Press.

Munby, H. (1983). A qualitative study of teachers' beliefs and principles. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada, April 11-14, 1983. (ERIC Document Reproduction Service No. ED 228 215)

Nespor, J. (1984). The interaction of school context and teachers' beliefs. (R & D Report No. 8023). Research and Development Center for Teacher Education, University of Texas, Austin, Texas. (ERIC Document Reproduction Service No. ED 260 079)

Nespor, J. (1987). The role of beliefs in the practice of teaching. Journal of Curriculum Studies, 19, 317-328.

Oberg, A. (1986). Using construct theory as a basis for research into teacher professional development. Journal of Curriculum Studies, 19, 55-65.

Oser, F. K. (1994). Moral perspectives on teaching. Review of Research in Education, 20, 57-127.

Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. Review of Educational Research, 62, 307-332.

Pope, M., & Denicolo, P. (1993). The art and science of constructivist research in teacher thinking. Teaching & Teacher Education, 9, 529-544.

Pope, M., & Keen, T. (1981). Personal construct psychology and education. London: Academic.

Posner, G. J., Strike, K. A., Hewson, P. W., & Gertog, W. A. (1982). Accommodation of a scientific conception: Toward a theory of conceptual change. Science Education, 66, 211-228.

Sarason, S. B. (1993). The case for change: Rethinking the preparation of educators. San Francisco: Jossey-Bass Publishers.

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2), 4-14.

Solas, J. (1992). Investigating teacher and student thinking about the process of teaching and learning using autobiography and repertory grid. Review of Educational Research, 62, 205-225.

Van Manen, M. (1977). Linking ways of knowing with ways of being practical. Curriculum Inquiry, 6, 205-228.

Zeichner, K. M., Tabachnick, B. R., & Densmore, K. (1987). Individual, institutional, and cultural influences on the development of teachers' craft knowledge. In J. Calderhead (Ed.), Exploring teachers' thinking (pp. 21-59). London: Cassell Educational Limited.

Images Reveal the "Internal Dialogue" of Realistic Teacher Education

17

19

Appendix

PARADIGM RATING

Participant # _____

Inventory # _____

Date _____

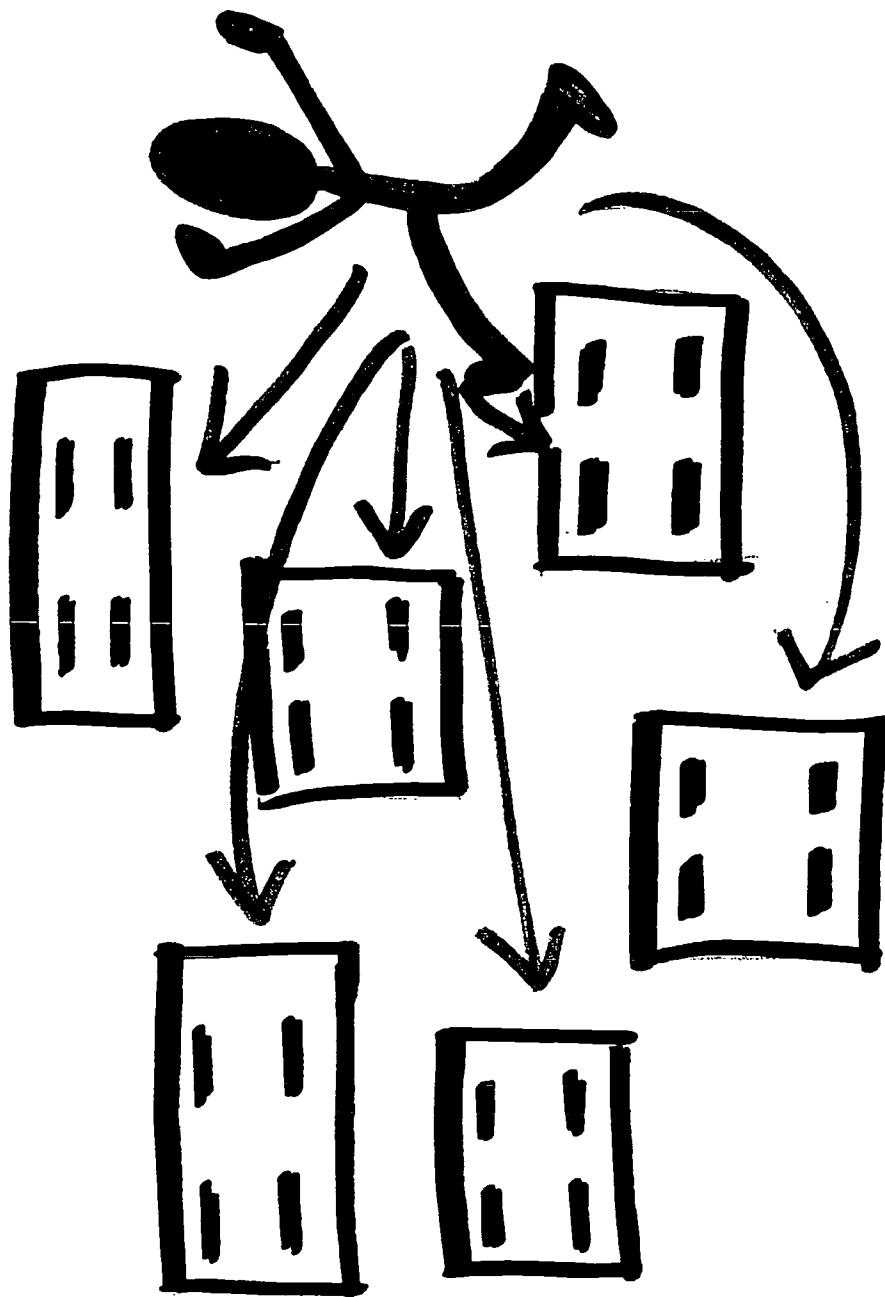
Practice # _____

- | | | |
|---|-------|---|
| 1. Students should learn correct answers and procedures. | _____ | 1. Students should learn multiple ways to seek various answers. |
| 2. Students should see their teachers as knowledge sources and evaluators. | _____ | 2. Students should see teachers as fellow-learners and coaches. |
| 3. Students should rely on experts to fill in the gaps in their knowledge. | _____ | 3. Students should use their current rich knowledge to construct new understanding. |
| 4. Students should learn how their ability, personality, and socio-economic status match to current roles in society. | _____ | 4. Students should learn how their confidence, commitment, and self-control help them reshape and renew roles in society. |
| 5. Students should learn objective, impersonal, and uniform knowledge. | _____ | 5. Students should learn subjective, personal, and unique knowledge. |
| 6. Students should learn to complete teacher-controlled and narrowly focused tasks. | _____ | 6. Students should learn to complete student-controlled and complex tasks. |
| 7. Students should compete against each other to attain rewards. | _____ | 7. Students should cooperate with each other to reach shared goals. |
| 8. Students should conform to established standards and learn obedience. | _____ | 8. Students should formulate their own standards and learn self-control. |

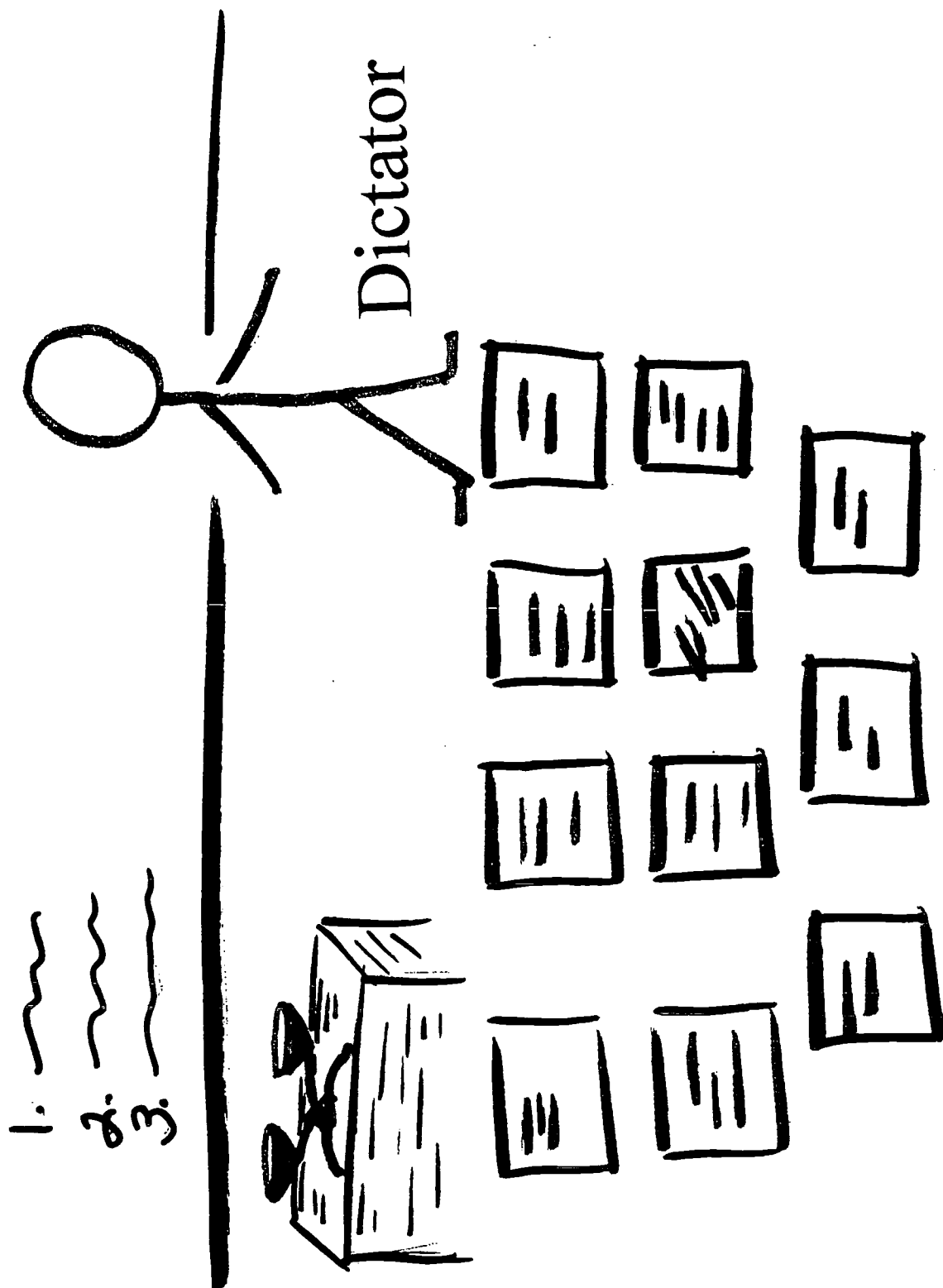
BEST COPY AVAILABLE

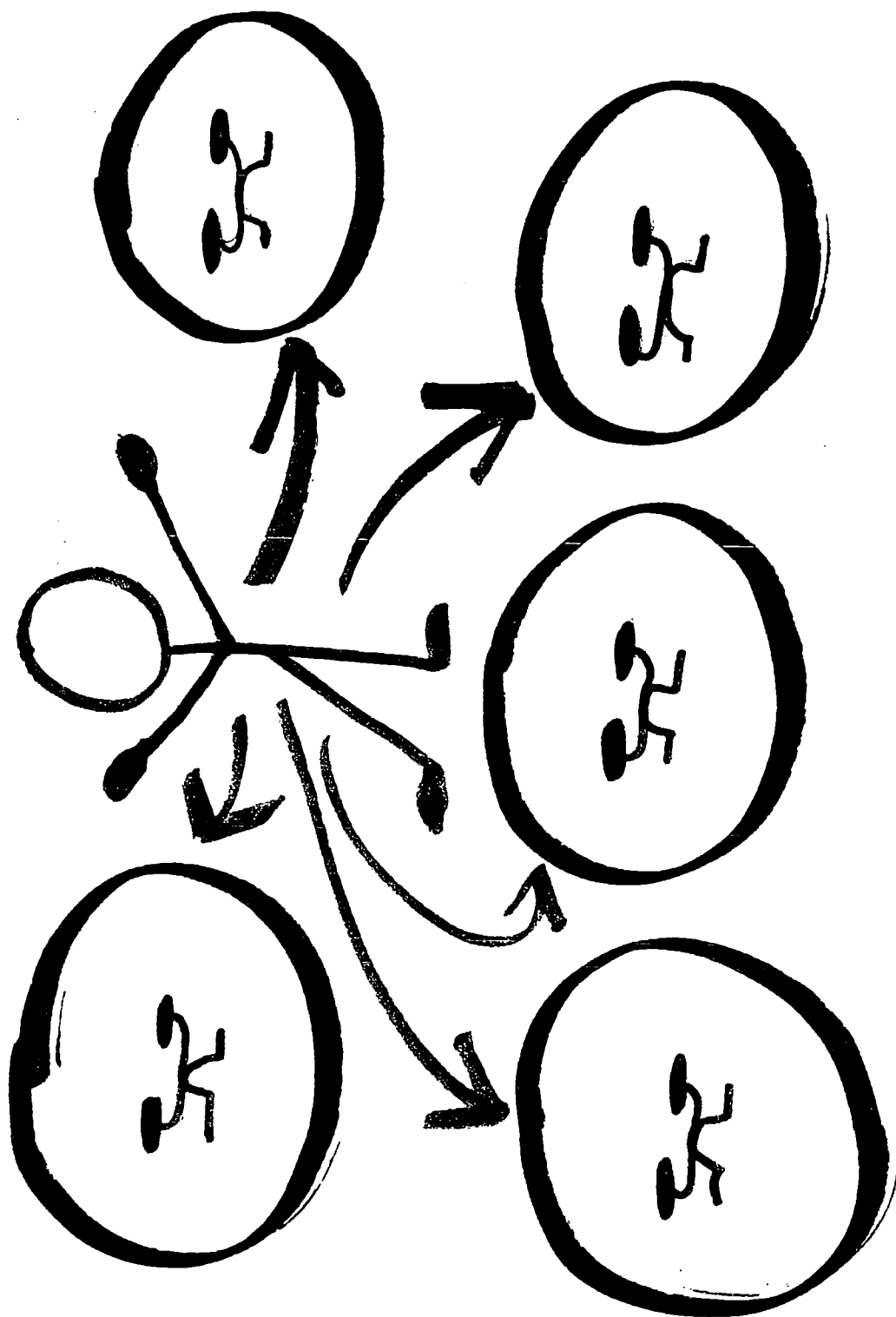
18

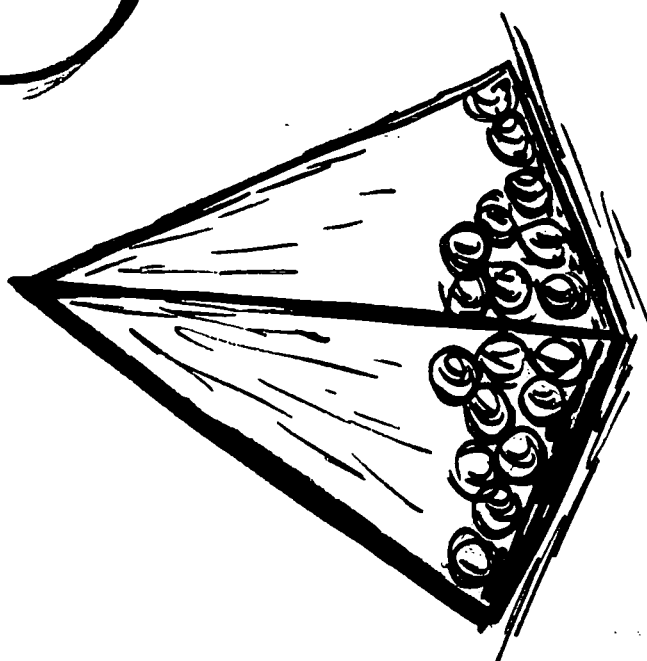
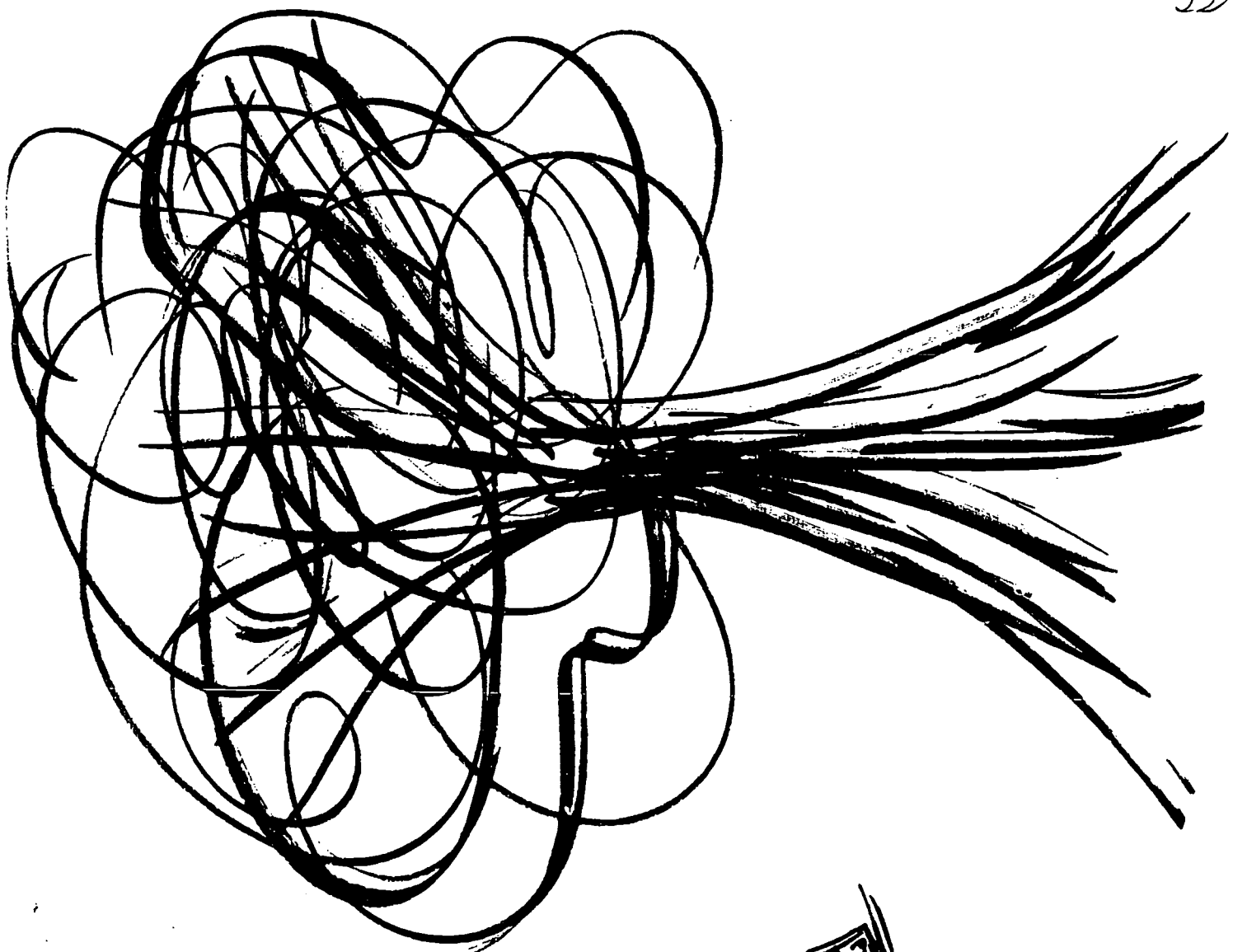




Facilitator



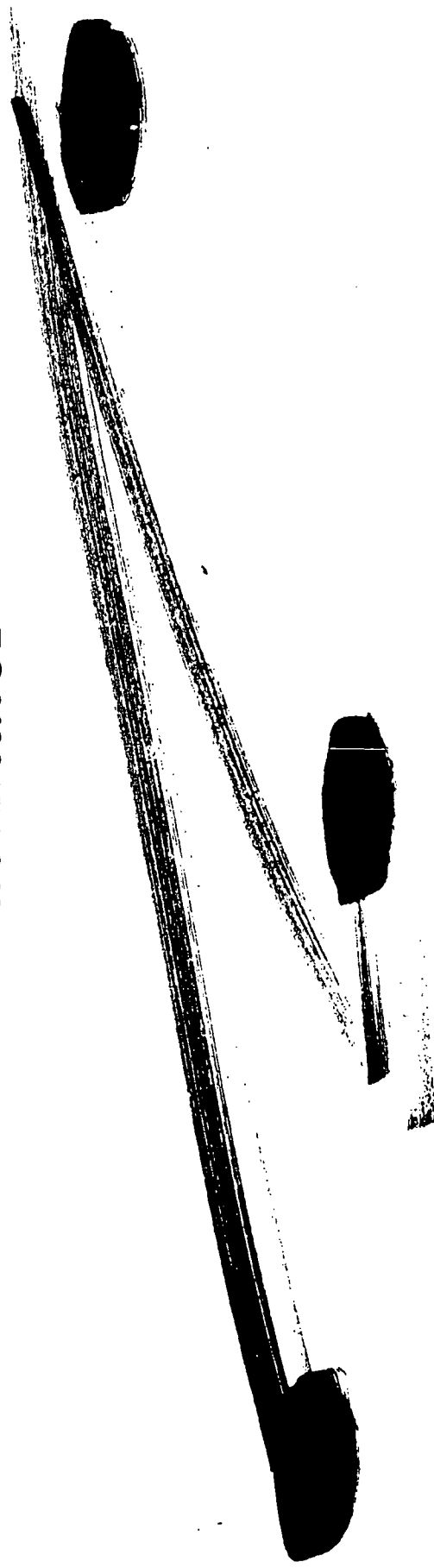




Dictator

Directive
Facilitator

Facilitator





U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

AERA



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: <i>Images Reread the "Internal Dialogue" of Realistic Teacher Education : A Script for the Videotaped Presentation with References and Bibliography</i>	
Author(s): <i>Martha W. McGovern</i>	
Corporate Source:	Publication Date: <i>April 25, 2000</i>

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

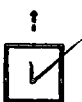
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1



The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A



The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B



Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign
here,→
please

Signature: <i>Martha W. McGovern</i>	Printed Name/Position/Title: <i>Martha W. McGovern, Asst Prof.</i>	
Organization/Address: <i>P.O. Box 8083, ECE+R Georgia Southern University Statesboro, GA 30460-8083</i>	Telephone: <i>(912) 681-5614</i>	FAX: _____
	E-Mail Address: <i>Martha@gsaiax2.cc.gasou.edu</i>	Date: <i>4/30/00</i>